

ITRF2014P Evaluation by GRG AC

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ITRF2014P Evaluation

Problem in ITRF2014P files provided by Z. Altamimi

• Overlaps period of one day in block epoch for stations: KRUB CICB SANB TRIB MATB REZB ARFB

• Error in file ITRF2014P-psd-doris.dat for ADGB station:

It should be "91501S004", because "S001" is assigned to ADEA So ADGB (S004) has not been corrected of PSD in the ITRF2014P

ITRF2014P file

Post-seismic stations:

REYB SAKA GOMB FAIB SANB AREB ADEA

Station missing (observation period too short)

SIGA FLOA SAMB PDNC OTTA OTTB OWEC HUAA LAOB

Station with same DOMES number and 2 Four Character ID differents:

HBKB -> HBKB + HBLB

PATB -> PATB + PAUB

KRUB -> KRUB + KRVB





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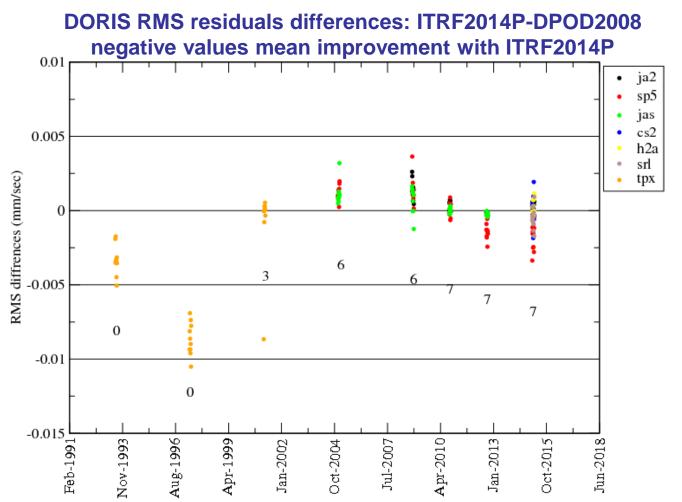
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•We analyzed DORIS2.2 data with 3.5-day arcs and a cut-off angle of 12°

Test without post-seismic models

Four consecutive weeks for different years to cover all the ITRF processing period (1993-2014) Satellites: TOPEX, JASON-1, SPOT5, JASON-2, CRYOSAT2, HY-2A, SARAL

Orbit comparison RMS3D < 5mm



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Positioning results by single satellite solution

•Multi-satellite Solution compared to ITRF2014P computed by CATREF Four weeks in 2015

Helmert parameters:

- scale and Geocenter
- number of stations in SINEX file
- number of stations used for CATREF processing
- WRMS of fit obtained by least-square adjustment of CATREF

Helmert	Solution	
parameters	DPOD2008	ITF2014P
TX (mm)	-1.9 ± 2.4	-0.6 ± 3.5
TY (mm)	-0.7 ± 4.4	0.6 ± 3.7
TZ (mm)	-9.1 ± 11.2	-14.6 ± 6.2
Scale (mm)	15.6 ± 2.1	16.0 ± 1.9
WRMS (mm)	11.9	11.6



